

REMARKS/ARGUMENTS

Claims 1-22 stand rejected in the outstanding Official Action. Claims 1, 3, 12 and 14 have been amended and therefore claims 1-22 remain in this application.

The Examiner's indication of PTO acceptance of the previously filed formal drawings is very much appreciated. Similarly, the Examiner's consideration of the prior art submitted with Applicants' previously filed Information Disclosure Statement is appreciated.

Claims 1-22 stand rejected under 35 USC §112 (second paragraph) as being indefinite. The Examiner contends that the phrase "sum data value" is being used to refer to "two different values or quantities" at lines 13 and 14 of original claim 1. Applicants respectfully traverse this contention and notes that the result obtained when employing half adder operations is represented by both a sum data value and a carry data value. This result is referenced in claim 1 by the language "sum and carry data values representing the result of the number of half adder operations."

As noted in Applicants' specification, for example page 4, line 1 to page 5, line 8, the inventors of the present invention realized that properties of the half adder form meant that it would be possible, once the number of half adder operations had been performed, to determine the presence of the predetermined alignment condition by use of the sum data value alone. As a result, the language of original claim 1 referred to the half adder logic producing at least the sum data value portion of the sum data value and the carry data value that would represent the result of the half adder operations.

As explained in the specification at page 4, line 29 through page 5, line 1, the present invention has no requirement to add together the carry data value and the sum data value and this

enables the existence of the predetermined alignment condition to be detected significantly more quickly than previously thought possible.

It is submitted that after reviewing Applicants' specification, one of ordinary skill in the art would clearly understand the operation claimed in Applicants' original independent claims 1 and 12. However, Applicants have amended the claim to delete the discussion of the "sum and carry data values representing the result of the number of half adder operations" (which would be understood by those of ordinary skill in the art when reviewing the original specification). This deletion should obviate any further questions as to what is covered by the claim and provide clear and precise antecedent basis for the use of the term "sum data value" later in the claim and in the dependent claims. It is believed that this amendment not only clarifies that the term "sum data value" does not refer to two different values or quantities in addition to clarifying the believed clear antecedent basis for the term.

As the Examiner correctly notes, in the last line of claim 1 and line 2 of claim 3, the word "units" should be "unit." This correction has been made in claims 1 and 3 and corresponding claims 12 and 14.

In view of the above amendments, there are believed to be no further bases for objection or rejection of claims 1-22 under 35 USC §112 (second paragraph) and any further rejection thereunder is respectfully traversed.

The Examiner's indication that claims 1-22 would be allowable if amended to overcome the rejection under §112 is very much appreciated. While Applicants traverse the rejection under §112, it is believed that the above amendments clearly overcome any bases for rejection under §112, placing claims 1-22 in condition for allowance.

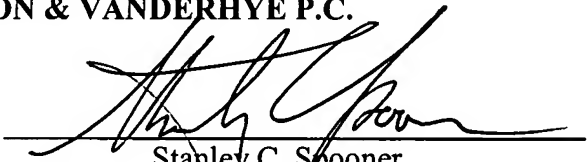
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LUTZ et al
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Having responded to all objections and rejections set forth in the outstanding Official Action, it is submitted that claims 1-22 are in condition for allowance and notice to that effect is respectfully requested. In the event the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of one or more of the above claims, he is respectfully requested to contact Applicants' undersigned representative.

Respectfully submitted,

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